# 7. Kavya

## Program Name: Kavya.java Input File: kavya.dat

Kavya has a fascination with sorts and letters. He has now come up with a process that sorts letters in a sentence depending on the frequency of letter occurrence. He also thinks all letters should be uppercase but keeps forgetting to hit the shift lock to enter all his letters in uppercase, but I'm sure you can help him with that issue. He doesn't want to sort anything else besides actual letters, which means for you if it's not a letter you get to ignore it and not include it in the final sorting.

For example, take the sentence:
"Yes, we finally made it to Regionals!"

Using the sorting routine described above, the result would be:
EEEEIIIAAALLLYYSSNNTTOOWFMDRG

Clearly the letter E has the greatest frequency (occurs more often than any other letter), and so all the Es are listed first. The letters I, A and L each occur three times, listed in the order they each first occur, the "I" in the word "finally", the "A" two letters later in the same word, with "L" immediately after that. "Y", "S", "T", "N", and "O" each occur twice and are listed in the order they first occur in the same manner, followed by the last six letters, each occurring only once.

**Input**: Several sentences each on its own line.

**Output:** All the letters in the sentence sorted by the number of times the letter occurs in the sentence, as described and demonstrated in the example above. If multiple letters have the same frequency of occurrence, then sort by when the letter first occurred in the sentence.

**Sample Input:**
```
Yes, we finally made it to Regionals!
Why do you think sorting seems to be so important in Computer Science?
This was not as hard of a problem as it seems to be.
```

**Sample Output:**
```
EEEEIIIAAALLLYYSSNNTTOOWFMDRG
OOOOOOOTTTTTTEEEEEEIIIIINNNNNSSSSSRRRMMMCCCHHYYUUPPWDKGBA
SSSSSSAAAAATTTTOOOOEEEEHHIIRRBBMMWNDFPL
```